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# (12) UK Patent Application (19) GB (11) 2 199 807 (13) A

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(54) Compact

(57) A compact for holding make-up, such as eye shadow comprises a bottom part (12) and a lid (14) which is hingedly connected to the same. The hinging of the lid (14) at the bottom part (12) is effected by a joint (16) which has an arm (28) connected integrally to the lid (14). The arm (28) has a very much curved portion which reaches out under a cover (18) for the joint (16).

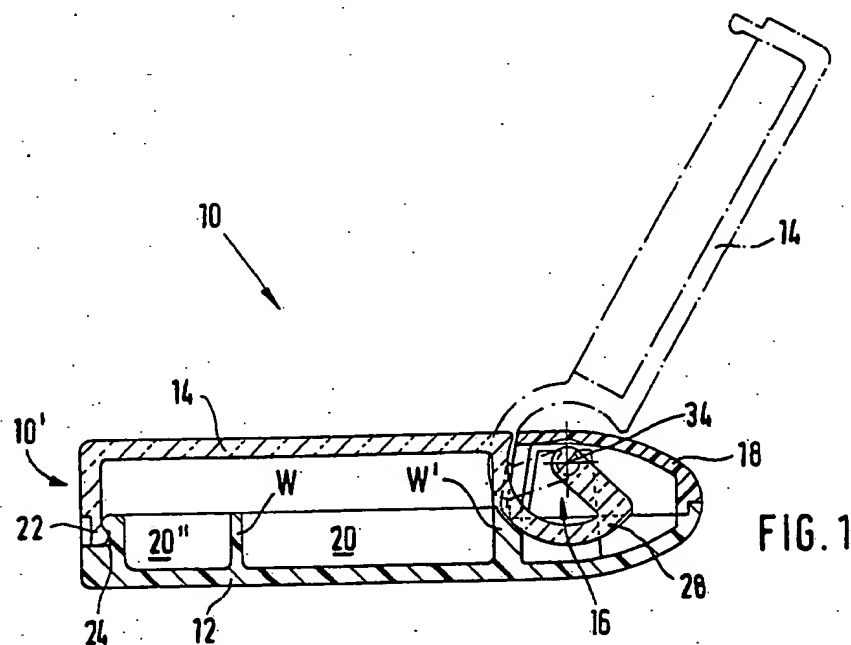
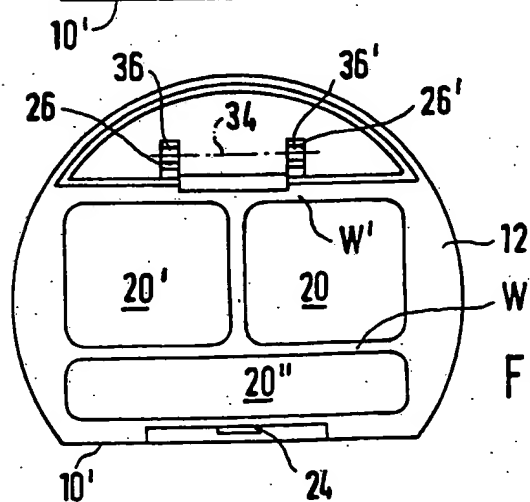
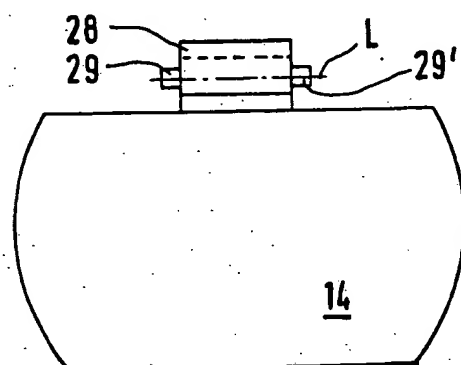
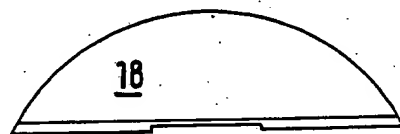
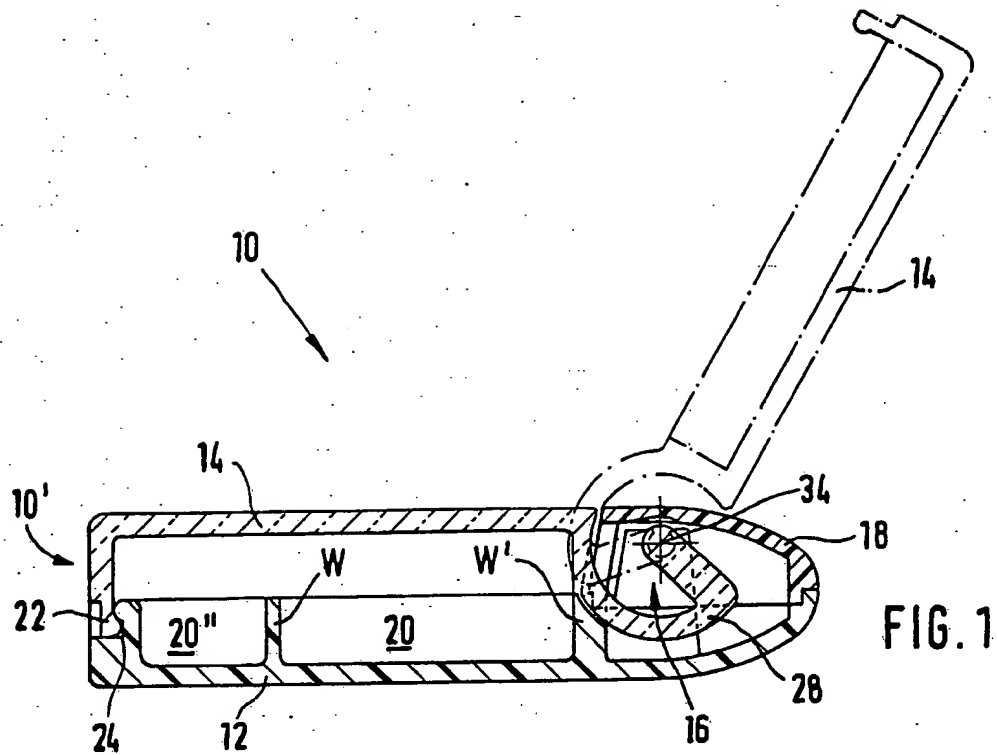
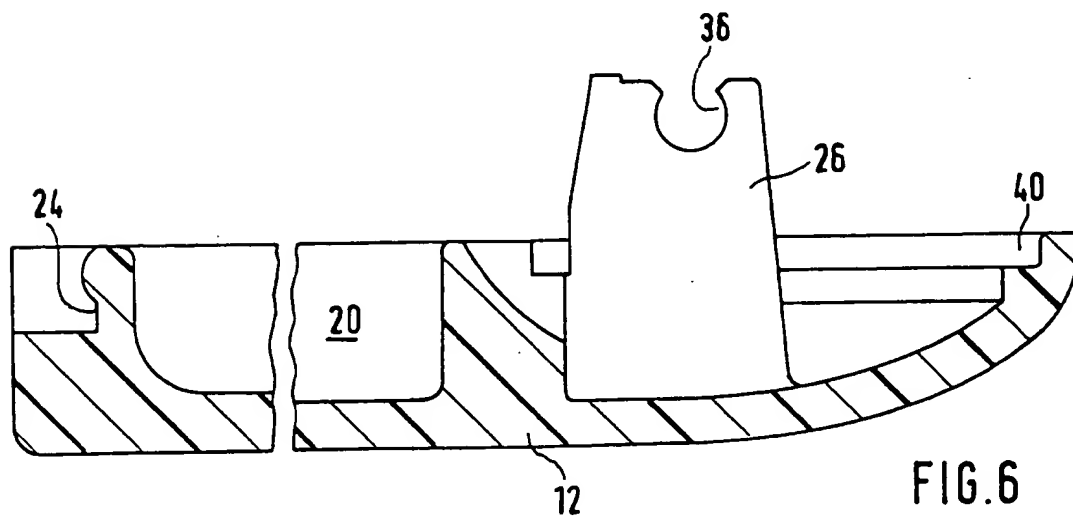
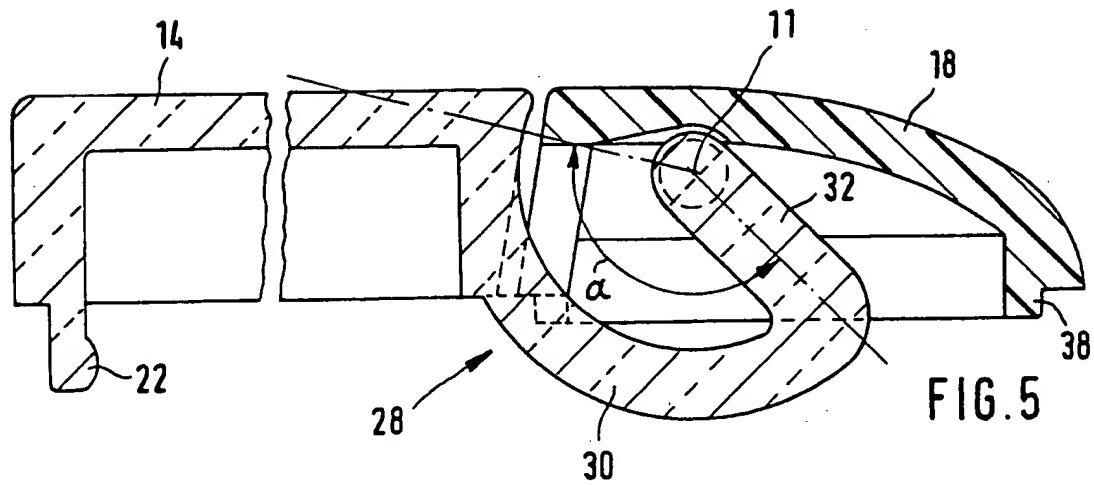


FIG. 1

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Compact

The invention relates to a compact, especially for holding make-up, such as eye shadow, and it consists of a bottom part and a lid hingedly connected to the same.

The pivotable connection between the lid and the bottom  
5 part of the compact usually is established by a hinge or the like.

It is the object of the invention to devise a hinged connection of the lid at the bottom part which connection is easy to manufacture by injection molding and permits a  
10 box ("eye shadow compact") to be produced which is dense and compact in shape and has no projecting members.

This object is met, in accordance with the invention, in that the lid is hingedly connected to the bottom part of the compact by a joint which includes at least one projection protruding from the bottom part. The lid is pivotably  
15 connected to this projection by at least one arm which projects from the lid and is curved so much in one portion that it extends under a cover of the projection.

In a preferred modification of the invention it is provided that two spaced apart projections protrude from the  
20 bottom part of the compact. Their free ends are formed with recesses engaged by two pins which are molded on the arm and the longitudinal axis of which constitutes the pivot axis when the lid is swung open.

25 In the compact designed in accordance with the invention all the members of the joint can be totally shielded by a cover so that no hinge or the like is to be seen from out-

side. And yet the lid can be opened through a very wide angle which is much greater than 90°.

To this end a preferred modification of the invention provides for the curvature of the arm which is formed integrally with the lid to extend as an arc through an angle of approximately from 120° to 170°. The center of curvature of the arc lies at least approximately on the pivot axis of the lid.

Preferably, the arm comprises an arcuate portion whose one end extends at least approximately vertically with respect to the main plane of the lid, while the other end passes over into a straight portion extending radially with respect to the pivot axis.

The compact according to the invention can be made of no more than three parts: a bottom part, a lid, and a cover for the joint. All three parts can be manufactured easily by injection molding. The cover for the joint fits on the bottom part and may be slipped into position and then bonded or fused to the bottom part.

In a preferred modification of the invention it is provided that two pins projecting from the lid become locked under pressure in two recesses formed at the free end of two projections which protrude from the bottom part.

An embodiment of the invention will be described further below with reference to the drawing, in which:

Fig. 1 is a sectional elevation of a compact, showing the open position of the lid in dash-dot lines;

Fig. 2 is a top plan view of the cover of the joint as a single member;

Fig. 3 is a top plan view of the lid as a single member;

Fig. 4 is a top plan view of the bottom part of the compact as a single member;

Fig. 5 is a detailed view of the hinging of the lid, and Fig. 6 shows the bottom part of the compact with part of the joint.

Fig. 1 shows a sectional view of the compact 10. The compact 10 consists of a bottom part 12, a lid 14 hingedly connected to the bottom part 12 by a joint 16, and a cover 18. All these parts are made of plastics by injection molding. The lid 14 may be made of transparent material.

Figs. 2, 3, and 4 are top plan views of the cover 18, the joint 16, and the lid 14 or bottom part 12, respectively.

The cover 18 functions to envelop the joint 16 towards the outside so that the box as a whole will be of dense, compact shape with no projecting pieces or visible hinges.

The lid 14 may be pivoted and when it is in open position 15 (shown by dash-dot lines in fig. 1) compartments 20, 20', and 20" formed in the bottom part 12 are accessible. They may be used for instance to hold eye shadow.

As an example, fig. 4 shows three compartments 20, 20', 20" which are separated from each other by walls W.

20 As shown in figs. 1 to 4, the compact 10 generally is of flat, rounded shape and is circular in top plan view, one circular segment being cut off whereby the compact 10 has a straight marginal portion 10'. At the straight marginal portion 10' of the compact 10 the lid 14 has a locking  
25 lug 22 which snaps into a recess 24 formed in the bottom part 12 (fig. 1).

According to figs. 1, 5, and 6 the lid 14 is hingedly connected to the bottom part 12 by the joint 16. The joint 16 has two projections 26, 26' (fig. 4) protruding from  
30 the bottom part 12. These projections 26, 26' of the bottom

part 12 together with an arm 28 which is pivoted at the lid 14 constitute the joint 16 by means of which the lid 14 is pivotable into the open position illustrated in fig. 1 by the dash-dot lines.

- 5 According to fig. 3 the arm 28 which is molded integral with the lid 14 includes two pins 29, 29' having a common longitudinal axis L. The pins 29, 29' are pressed into recesses 36, 36' (fig. 4) which are formed at the free ends of the projections 26, 26' (see also fig. 6).
- 10 According to figs. 1 and 5 the arm 28 essentially comprises two portions. One portion 30 approximately has the shape of a circular arc, the center of curvature M being located on the longitudinal axis L of the pins 29, 29' and on the pivot axis 34 (fig. 4) of the lid 14. In accordance with
- 15 figs. 1 and 5 this portion 30 of the arm 28 extends approximately at right angles with respect to the main plane of the lid 14. The other portion 32 of the arm 28 extends radially with respect to the pivot axis 34 or the center of curvature M. The arcuate portion 30 of the arm 28 de-
- 20 fines an angle  $\alpha$  of approximately  $160^\circ$ .

It may be gathered from fig. 1 that the lid 14 can be swung open wide by virtue of the design described of the arm 28. And when open, no member of the joint projects from the compact 10 or can be seen from outside.

- 25 The compact 10 consists of no more than three parts, each to be manufactured integrally, namely the bottom part 12, the lid 14, and the cover 18.

The lid 14 is arrested under pressure in the recesses 36, 36' (see figs. 4 and 6) of the bottom part 12 by means of

30 the pins 29, 29'. And the cover 18 includes a circular projection 38 which is pushed into a complementary recess 40 formed in the bottom part 12 (fig. 6). The cover 18 can be fastened to the bottom part 12 by bonding or fusing.